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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,715	05/17/2005	Jens Birger Nilsson	66352-035-7	8394

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EXAMINER
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GODENSCHWAGER, PETER F

ART UNIT	PAPER NUMBER
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1796

MAIL DATE	DELIVERY MODE
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08/28/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/523,715	<b>Applicant(s)</b> NILSSON, JENS BIRGER	
	<b>Examiner</b> PETER F. GODENSCHWAGER	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 28-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 28-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

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### **DETAILED ACTION**

Applicant's reply filed May 12, 2008 has been fully considered. Claims 1-27 are canceled, claims 28-36 are new, and claims 28-36 are pending.

#### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mevel (US Pat. No. 3,274,105).

Regarding Claim 28: Mevel teaches a fire extinguishing solution comprising water, potassium hydroxide (93% / highly concentrated and >80%), acetic acid, tetrapotassium pyrophosphate, and potassium carbonate (dipotassium carbonate /  $K_2CO_3$ ) with a pH of 7.0 to 8.5, and further does not disclose the use of protein (1:50-60, 2:12-14, Example I 4:4-12).

Mevel does not teach the pH range of 6.5 to 7.0. However, A prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected [the claimed product and a product disclosed in the prior art] to have the same properties." *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985). Furthermore, one would be motivated to use a pH of 7.0 as Mevel teaches that a solution with a pH of 7.0 gives excellent extinguishing

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effects without risks of precipitation, and that pH's less than 8.5 are preferred so as to obtain solutions that are less corrosive and less sensitive to wetting agents (1:51-60).

Regarding Claim 29: Mevel does not teach the specific range of acidic concentrate of 35% to 37% by weight of a 90% solution (or 31.5% to 33.3% by weight total). However, it is well known in the art to change the relative amounts of result effective variables such as the concentration of acid (see MPEP 2144.05). At the time of the invention, a person of ordinary skill in the art would have found it obvious to optimize the relative amount of acidic concentrate in the composition and would have been motivated to do so to control the pH of the solution which Mevel teaches is important to minimize the corrosiveness of the solution (1:51-60).

Claims 30-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mevel (US Pat. No. 3,274,105) as applied to claim 29 above, and further in view of Berger (US Pat. No. 5,585,028).

Mevel renders the composition of claim 29 obvious as set forth above.

Regarding Claim 30: Mevel does not teach the composition further comprising citric acid. However, Berger teaches the use of citric acid in a fire extinguishing composition (4:32-38). Mevel and Berger are analogous art because they are concerned with the same field of endeavor, namely fire fighting compositions. At the time of the invention, a person of ordinary skill in the art would have found it obvious to use the citric acid of Berger in the composition of Mevel and would have been motivated to do so because Berger teaches that the citric acid is useful to control the pH of the solution (4:32-38). Furthermore, Mevel teaches that the pH of the composition is important to regulate so that it does not become corrosive (1:51-60).

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Regarding Claim 31: Mevel does not teach the composition where the highly concentrated alkali is present in 15-25% by weight. However, it is well known in the art to change result effective variable such as the weight percent of highly concentrated alkali (see MPEP 2144.05). At the time of the invention, a person of ordinary skill in the art would have found it obvious to optimize the weight percent of highly concentrated alkali in the solution and would have been motivated to do so because Mevel teaches that the concentration of the solutes in the water should be changed depending on the type of fire being extinguished (2:1-11).

Regarding Claim 32: Mevel teaches the composition comprising potassium carbonate (dipotassium carbonate /  $K_2CO_3$ ) (3:25-35, Example I, 4:4-12). The Office recognizes that the potassium carbonate of Mevel is not taught as anhydrous potassium carbonate. However, as the potassium carbonate is being added to a solution of water, the claimed composition and the composition rendered obvious by Mevel will implicitly be the same.

Regarding Claim 33: Mevel further teaches a wetting agent (softening agent) in 0-2.0%, overlapping with sufficient specificity the claimed range of 0.5-1.5% (2:27-41).

Regarding Claim 34: Mevel further teaches the composition comprising potassium acetate (1:51-55).

Regarding Claim 35: Mevel does not teach the composition where the dipotassium carbonate is present in 6-10% by weight. However, it is well known in the art to change result effective variable such as the weight percent of dipotassium carbonate (See MPEP 2144.05). At the time of the invention, a person of ordinary skill in the art would have found it obvious to optimize the relative amount of dipotassium carbonate and would have been motivated to do so

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because Mevel teaches that the concentration of the solutes in the water should be changed depending on the type of fire being extinguished (2:1-11).

Regarding Claim 36: Mevel does not teach the composition where the tetrapotassium phosphate is present in 2-3% by weight. However, it is well known in the art to change result effective variable such as the weight percent of tetrapotassium phosphate (See MPEP 2144.05). At the time of the invention, a person of ordinary skill in the art would have found it obvious to optimize the relative amount of tetrapotassium phosphate and would have been motivated to do so to optimize the fire extinguishing ability of the composition, specifically the ability on mixed fires of reducing the risk of re-flashing (2:21-26).

### ***Response to Arguments***

Applicant's arguments filed May 15, 2008 have been fully considered but they are not persuasive.

Applicant argues that Mevel (US Pat. No. 3,274,105) necessitates the use of a composition with an alkali pH (pH >7.0) and that all added chemical compounds of Mevel refer to alkaline compounds. However, as set forth above in the rejection of claim 28, Mevel does not necessitate the use of an alkali pH, only a pH of at least 7.0, with 7.0 being neutral. In fact, Mevel gives motivation for using a more neutral pH in order to reduce the corrosiveness of the composition (1:51-60). Furthermore, as set forth above, Mevel teaches the use of acetic acid an acidic compound (3:34-35).

Applicant argues that Mevel focuses on using potassium acetate and its benefits at an alkaline pH of 9.25 and that the acetate found in Mevel is not responsible eliminating mould or

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fungus attack. However, it is not clear where Mevel teaches a pH of 9.25 as Mevel is not teaching potassium acetate by itself by instead in an aqueous solution with a pH of 7.0-8.5 (1:51-60). Furthermore, the potassium acetate of Mevel would inherently be able to combat mould and/or fungus regardless of whether Mevel teaches that it would have these properties.

Applicant argues that the instant claims recite a composition that does not comprise protein, ammonium phosphate, or urea, and is of neutral pH. However, the primary reference, Mevel, makes no reference to the inclusion of protein, ammonium phosphate, or urea. With regards to the neutral pH, this argument has been addressed above.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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*Correspondence*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PETER F. GODENSCHWAGER whose telephone number is (571)270-3302. The examiner can normally be reached on Monday-Friday 7:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on (571) 272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Eashoo, Ph.D./  
Supervisory Patent Examiner, Art Unit 1796  
26-Aug-08

/P. F. G./  
Examiner, Art Unit 1796  
August 20, 2008



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